

In re: Buekers et al.
Serial No. 10/719,691
Filed: November 21, 2003
Page 2 of 18

Proposed Amendments to The Drawings:

The attached sheets of drawings include proposed changes to Figures 1, 2, 5 and 6.
The sheet that includes Figure 1 is proposed to replace the original sheet including Figure 1.
The sheet that includes Figure 2 is proposed to replace the original sheet including Figure 2.
The sheet that includes Figures 5 and 6 is proposed to replace the original sheet including Figures 5 and 6.

Attachment: Annotated Sheets 1, 2 and 5.

REMARKS

Applicants appreciate the thorough examination of the present application as evidenced by the Office Action. Claim 1 has been canceled above to expedite issuance of the present application. Amendments to other of the claims will be discussed below. The specification and drawings have been amended above in light of various objections raised in this Office Action as will be discussed below. Applicants submit that the present rejections should be withdrawn for at least the reasons discussed below.

The Drawing Objection:

Proposed drawing changes are attached hereto. Replacement sheets will be submitted responsive to an indication from the Examiner that the drawing changes are acceptable. The proposed changes add arrow heads in Figure 2 associated with the arrows "B" that were inadvertently left out when the formal drawings were prepared to replace the originally filed informal drawings. Reference numerals are also added to Figures 1, 5 and 6 for the compression-expandable plug 1', 50. The reference numbers are revised in Figures 5 and 6 based on the objection to the specification as discussed below. Applicants note that the amendments to the specification above are based on these proposed drawing changes in anticipation of acceptance of the proposed changes by the Examiner. Accordingly, Applicants submit that the objections to the drawings are overcome by the proposed amended drawings.

Objection to the Specification:

The specification is objected to based on use of a single reference number for different parts. Figures 5 and 6 are amended to correct this usage in the proposed drawing changes discussed above. The specification has been amended above based on the proposed drawing changes. Accordingly, Applicants submit that the objections to the specification are overcome by the amendments above.

The Section 112 Rejections:

Claims 3-4 and 6-30 are rejected under 35 U.S.C. § 112 as being indefinite. The "means" of Claim 3 is objected to as confusing. While Applicants submit there was no confusion, as the "means" of Claim 3 was presented as "further comprising," Applicants' submit the rejection of Claim 3 under Section 112 is obviated by the amendments to Claim 2 and the cancellation of Claim 3 above. Claims 6, 9, 20 and 28 stand objected to for use of the term "and/or." While Applicants submit usage of this term does not render the claims indefinite, these claims have been amended above to obviate the Section 112 rejections.

The Art Rejections:

Claims 18-22 and 27-28 Are in Form for Allowance

Claims 18-22 and 27-28 are indicated in the Office Action as containing patentable subject matter. Office Action, p.10. Claims 18 and 27 have been amended above to place them in independent form, including the recitations of Claim 9 from which they previously depended. Accordingly, Claims 18-22 and 27-28 are in a form indicated as allowable.

Independent Claim 2 is Patentable Over the Cited Art

Independent Claim 2 stands rejected under 35 U.S.C. § 102 as anticipated by United States Patent No. 4,622,436 to Kinnan ("Kinnan"). Office Action, p. 4. Amended Claim 2 recites:

A compression-expandable plug comprising:
an elastomeric gasket having longitudinal passages **that are separate from one another** and are configured to be positioned around optical-fibre-containing mini-tubes in an optical fibre duct;
means for longitudinally compressing the gasket thereby laterally expanding it to exert sealing pressure around the mini-tubes and between the mini-tubes and the duct; and
means for limiting movement of means for longitudinally compressing the gasket to a preset distance to limit the longitudinal compression applied to the gasket so as to limit damage to the optical fibres. (emphasis added)

Applicants submit that at least the highlighted portions of Claim 2 are not disclosed or suggested by Kinnan.

As an initial matter, Kinnan fails to disclose longitudinal passages that "are

separate from one another" as the portions 18a-18c of Kinnan overlap. *See*, Kinnan, Figure 2. Accordingly, the rejection of Claim 2 should be withdrawn for at least this reason.

In addition, the means for limiting, now recited in Claim 2, corresponds to the means for limiting previously found in Claim 3. The recitation of function for the means for limiting has been clarified in light of the Examiner's confusion as reflected in the Section 112 rejection of Claim 3 in the Office Action. An exemplary corresponding structure of the "means for limiting" is described in the present specification as:

The nut 54 may be constructed with a blind threaded bore 541 of limited depth in order to limit the applied compression and resulting radial expansion of the gasket as the nut and bolt draw the two compression members 52 towards each other. In this way, the compression applied to the mini-tubes by the radially expanding gasket may be limited to selected safe levels.

Specification, p. 9, lines 15-19 (as amended). The specification further states:

It can be seen in both Figure 3 and Figure 2 that the screwthreaded compression device 15 may be tightened only to a preset extent such that the compression plates are moved towards each other by a preset distance. This may be arranged such that the preset tightening of the compression device causes a preset lateral expansion of the sealing elements, thereby providing a desired sealing contact force between the sealing elements and their respective elongate article or object.

Specification, p. 7, line 30 to p. 8, line 2.

The Office Action rejected Claim 3 without citation to any portion of Kinnan by merely asserting "that the assembly of Kinnan meet the structural limitations." Office Action, p. 5. As an initial matter, this fails to state a prima facie grounds for rejection as there is no discussion of the structure corresponding to the "means for limiting" or how the structure of Kinnan discloses or suggests such a structure or its equivalent. The disclosed structure of the present invention limits motion to "a preset distance" to prevent over compression. While an operator of the device described in Kinnan could choose to cease tightening the bolts 52 before over-compression is applied, this does not disclose the "means for limiting" of amended Claim 2 as Kinnan does not appear to disclose or suggest any means for compelling the operator of the device to cease tightening the bolts after a preset distance. Accordingly,

In re: Buekers et al.
Serial No. 10/719,691
Filed: November 21, 2003
Page 16 of 18

the rejection of independent Claim 2 should also be withdrawn for at least these additional reasons.

Independent Claim 9 is Patentable Over the Cited Art

Independent Claim 9 stands rejected under 35 U.S.C. § 102 as anticipated by Kinnan. Office Action, p. 6. Amended Claim 9 recites:

A sealing device for sealing an opening in an object between the object and at least one elongate article extending through the opening, the sealing device comprising:

a pair of compression plates;
at least two deformable sealing elements spaced apart from each other between the plates;

a compression device arranged to compress the sealing elements by moving the plates towards each other to expand the sealing elements in a lateral direction with respect to a direction of movement of the plates such that each sealing element makes a respective sealing contact with at least one of the object or elongate article;

wherein the sealing elements are spaced apart from each other in the lateral direction, and a first of the sealing elements is located between the compression plates along a lateral periphery of the plates; and

wherein a first of the sealing elements is located between the compression plates along a lateral periphery of the plates and wherein the sealing elements are spaced apart from each other in the lateral direction and wherein the compression device is arranged to compress the sealing elements without compressing any sealing material extending between the sealing elements. (emphasis added)

Applicants submit that at least the highlighted portions of Claim 9 are not disclosed or suggested by Kinnan.

Claim 9 now recites a plurality of sealing elements, such as sealing elements 11a, 11b of Figure 2, which are spaced apart from each other between the compression plates and where the compression device compresses the sealing elements "without compressing any sealing material extending between the sealing elements." Such embodiments are illustrated, for example, in Figure 2 where:

the relative thicknesses (in the direction of movement of the plates as indicated by arrows A) of the sealing elements and the support 9 are such that when the sealing elements are compressed between the plates, the support itself may not be compressed, i.e. there is a gap 29 between the support and at least one of the compression plates when the sealing elements are compressed. This configuration

may have the advantage that because only the discrete sealing elements are compressed (and not an entire mass of sealing material extending throughout the entire area between the compression plates), lower compression forces (than would otherwise have been the case) may be required. This may provide the benefits described earlier, such as lessening the risk of damage to micro-ducts or other elongate articles extending through the sealing device.

Specification, p. 7, lines 2-12. There is no disclosure or suggestion of any such structure in Kinnan, where the ring member 18 extends between the sets 36, 32 and the ring member 24 extends between the sets 32, 38, resulting in a structure that is subject to the disadvantages described in the specification excerpt above. Accordingly, the rejection of Claim 9 should be withdrawn for at least these reasons.

The Dependent Claims

The dependent claims are patentable at least based on their dependence on Claim 2 or Claim 9. Various of the dependent claims are also separately patentable. For example, Claim 3 recites a "blind-ended thread in the nut." The Office Action asserts this is disclosed by Kinnan at column 4, lines 50-62. Office Action, p. 5. While a nut and bolt are disclosed by Kinnan, Applicants can find no disclosure therein of a blind-ended thread in the nut. Accordingly, Claim 4 is separately patentable for at least these reasons. Claim 6 is separately patentable as the Section 112 rejection has been obviated and no assertion is presented of where the recitations of Claim 6 are found or suggested in the cited art.

Conclusion

Applicants respectfully submit that, for the reasons discussed above, the references cited in the present rejections do not disclose or suggest the present invention as claimed. Accordingly, Applicants respectfully request allowance of all the pending claims and passing this application to issue.

Respectfully submitted,



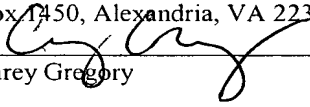
Robert W. Glatz
Registration No. 36,811

In re: Buekers et al.
Serial No. 10/719,691
Filed: November 21, 2003
Page 18 of 18

Myers Bigel Sibley & Sajovec
P.O. Box 37428
Raleigh, NC 27627
(919) 854-1400 phone
(919) 854-1401 fax

Certificate of Mailing under 37 CFR 1.8

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Carey Gregory

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